reference antibiotic to form a complex with the recognition agent which is not complexed with the antibiotic or antibiotics in the biological fluid, and

(c) detecting the antibiotic or antibiotics by determining the amount of the recognition agent complexed to the immobilized reference antibiotic in step (b),

wherein the recognition agent comprises a receptor which specifically binds to antibiotics containing a β-lactam ring and is obtained from *Bacillus licheniformis*, and

wherein the amount of the recognition agent which has been complexed in step (b) with the reference antibiotic is inversely proportional to the amount of the antibiotic or antibiotics present in the biological fluid.

2. ~~17.~~ The process according to Claim ~~16~~ 1, wherein the receptor which specifically binds to antibiotics containing a β-lactam ring is the BlaR receptor or the BlaR-CTD receptor.

3 ~~18.~~ The process according to Claim ~~16~~ 1, wherein the receptor which specifically binds to antibiotics containing a β-lactam ring is coupled to a labelling agent selected from the group consisting of metallic colloidal particles, colloidal particles of selenium, colloidal particles of carbon, colloidal particles of sulphur, colloidal particles of tellurium, and colloidal particles of colored synthetic latices.

6 ~~19.~~ The process according to Claim ~~16~~ 1, wherein the receptor which specifically binds to antibiotics containing a β-lactam ring is coupled to a labelling agent which is a fluorescent substance.

7 ~~20.~~ The process according to Claim ~~16~~ 1, wherein the receptor which specifically binds to antibiotics containing a β-lactam ring is coupled to a labelling agent which is an enzyme.

8 ~~21.~~ The process according to Claim ~~20~~ 7, wherein the receptor which specifically binds to antibiotics is chemically or genetically coupled to the enzyme.

4 ~~22.~~ The process according to Claim ~~18~~ 3, wherein the receptor which specifically binds to antibiotics containing a β-lactam ring is coupled to the labelling agent before step (a).

5 ~~23.~~ The process according to Claim ~~18~~ 3, wherein the receptor which specifically binds to antibiotics containing a β-lactam ring is coupled to the labelling agent during or after step (a).

9 ~~24.~~ The process according to Claim ~~16~~ 1, wherein steps (a) and (b) take place simultaneously.

10 ~~25.~~ The process according to Claim ~~16~~ 1, wherein the solid support used in step (b) is selected from tubes, plates or rods coated with the reference antibiotic.

11 ~~26.~~ The process according to Claim ~~16~~ 1, wherein the solid support used in step (b) is a test device comprising:

a solid support which has a first and second end, to which are attached, successively, starting from the first end,

a membrane for purifying the biological fluid,

a membrane on which at least one reference antibiotic is immobilized, and

an absorbent membrane.

12 ~~27.~~ The process according to Claim ~~16~~ 1, wherein the solid support used in step (b) consists of a set of magnetic or non-magnetic beads.

28. A test kit for detecting antibiotics in a biological fluid, by the process according to Claim 16, comprising at least one recognition agent, which is a receptor which specifically binds to antibiotics containing a β-lactam ring and is obtained from *Bacillus licheniformis*, and at least one reference antibiotic immobilized on a solid support.

29. The test kit according to Claim 28, wherein the receptor which specifically binds to antibiotics containing a β-lactam ring is the BlaR receptor or the BlaR-CTD receptor.

30. The test kit according to Claim 28, wherein the receptor which specifically binds to antibiotics containing a β-lactam ring is coupled to a labelling agent selected from the group consisting of metallic colloidal particles, colloidal particles of selenium, colloidal particles of carbon, colloidal particles of sulphur, colloidal particles of tellurium, and colloidal particles of colored synthetic latices.

31. The test kit according to Claim 28, wherein the receptor which specifically binds to antibiotics containing a β-lactam ring is coupled to a labelling agent which is a fluorescent substance.

32. The test kit according to Claim 28, wherein the receptor which specifically binds to antibiotics containing a β-lactam ring is coupled to a labelling agent which is an enzyme.

33. The test kit according to Claim 28, wherein the receptor which specifically binds to antibiotics is chemically or genetically coupled to the enzyme.

34. The test kit according to Claim 28, wherein the solid support is selected from tubes, plates or rods coated with the reference antibiotic.

35. The test kit according to Claim 28, wherein the solid support is a test device comprising:

a solid support which has a first and second end, to which are attached, successively, starting from the first end,

a membrane for purifying the biological fluid,

a membrane on which at least one reference antibiotic is immobilized, and

an absorbent membrane.

36. The test kit according to Claim 28, wherein the solid support consists of a set of magnetic or non-magnetic beads.